Testimony before the Utah State Senate/House Subcommittee on Government Competition and Privatization
September 6, 2007
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Heartland Institute/Reason Foundation

Chairman Stephenson, Chairman Frank and Distinguished Legislators:

Good morning.

I would like to thank this committee, and the Utah State Legislature, for the opportunity to address you today.

My name is Steven Titch. I am senior fellow for IT and Telecom Policy for the Heartland Institute and Telecom Policy Analyst with the Reason Foundation, two non-profit, non-partisan policy research organizations aimed at developing and fostering free market ideas in public policy.

I have been professionally involved in the telecom industry for more than 25 years, much of that as a journalist, editor and analyst. Past positions include editorial director of *Telephony*, the telecom industry's leading business-to-business publication, as well as editorial management positions with *Tele.com* and *Communications Week*.

For the past eight years, in addition to policy work, I have done editorial project management consulting, with most, but not all, in telecom or information technology areas. My clients are publishers, agencies and sometimes, private companies. In the interest of full disclosure, for about 15 months from 2003 to 2004, one of my clients was HLB Communications, a Chicago Public Relations firm, which hired me to support a corporate and marketing communications project they were doing for Qwest Communications. This amounted to about 150 hours of work over a 15-month period. Since then I have not been employed or retained by Qwest, its agencies, or any other incumbent telecommunications company.

More important, over the course of my career I have watched and reported first hand the profound innovation and economic growth that has sprung from policies, unleashed in the 1980s, that have served to create competition, deregulation and privatization in the telecommunications marketplace.

While I know much of your work looks at privatization of services traditionally seen as the function of government, municipal broadband is something of the reverse. It seeks to take a service—broadband Internet access—that until now has been provided largely by the private sector, and make local or state government an alternative, and often, competitive player.

Many of the same principles that apply to broad privatization arguments fit here, of course. As I am a telecom specialist however, I will focus on some of the particular reasons why municipalization of telecom and broadband is a bad idea.

When it comes to municipal broadband, a few years ago, defending my position was a bit tougher. It did indeed seem like broadband deployment was moving slowly. And while most municipal broadband operations had failed to gain traction, the experiment had not been tried in larger markets with greater economies of scale. Not ready to admit failure, state and local governments were looking at new models, hoping to find some kind of magic formula for government-run service. Here in Utah, the city of Provo approached competitive broadband as a wholesaler, and planned to rely on commercial retail partners do the marketing, program packaging and customer service. More recently, within the past 12 to 18 months, cities have shifted away from fiber toward wireless, principally private-public partnerships, where they would select a commercial provider, who in return for exclusive access to city right of way, would agree to provide "all-over" wireless coverage, with a tier of service either free or low-price.

Well, after giving these new models a chance, and seeing the same dismal results, we must now conclude, without doubt, that government, at any level, should not be in the business of providing cable, phone and Internet service.

First let's look at some projects here in Utah.

iProvo

Three years into operation, the municipal broadband system in Provo, Utah, is following the pattern seen in other cities that have mounted expensive fiber optic networking projects.

In July of this year, iProvo, the $39.5 million system launched in 2004, requested another $1.2 million in funds from the Provo's electric utility to meet its costs. This came on top of a 2006 request for $1 million. What's more, Kevin Garlick, iProvo Acting Director at the time, told KCPW-TV that iProvo may need another $1.5 million next year.[1]

The request for additional funding comes after a troubled two-and-a-half years operation marked by slow growth and a rocky relationship with its initial retail partner. In June, Garlick said that iProvo's breakeven point was 13,000 to 15,000 customers, not 10,000 as set forth in the original business plan. At the same time, he said iProvo was "just shy" of 10,000 in June. iProvo's business plan had forecast 10,000 customers by the end of 2005.

UTOPIA

The statewide fiber optic backbone operated by the Utah Telecommunication Open Infrastructure Agency (UTOPIA), conceived as a state-owned bandwidth wholesaler, is

[1] KCPW News, "City to Pump $1.2 Million into Broadband Experiment," June 8, 2007, available at http://kcpw.org/article/3720.

expected to lose $17.3 million in 2008. Coming on top of losses of $10.8 million and $10.4 million in 2007 and 2006, respectively, this will bring UTOPIA's cumulative loss for its first three years of operation to $38.5 million.

A look at UTOPIA's budget statements (appended) reveals some of the problems. For starters, the agency budgeted $5.25 million from "Charges for Services"—that is, actual revenue from sales. Later, UTOPIA amended this amount down to $1.75 million, just 33 percent of its original projection. At the same time, operating expenses were underestimated by some 44 percent. The approved 2007 budget of $651,300 was later amended to $1.17 million.

Both UTOPIA and iProvo will continue to lose money into 2008. More critically, their net assets will continue to decline as its debt and interest load grows. For iProvo, as of last year, liabilities outstripped assets by $2 million—the agency owed more than the system was worth.[2] This gap will widen and it will become increasingly difficult for iProvo to ever pay off the debt on its system or realize full value of its investment.

Muni Problems Elsewhere

The problems in Utah follow the same pattern as problems elsewhere throughout the country, where municipal systems are marked by a tendency to underestimate costs and overestimate uptake.

The year-to-year losses, rising debt and depleting cash repeat a pattern for municipal systems that's been well documented in numerous other studies, including a 2006 report from Balhoff & Rowe, a private financial consulting firm.[3]

The result is that municipal systems end up spending more and more money while chasing an elusive break-even point, which always seems to be just a year or two in the future.

A Pacific Research Institute survey of 52 municipal broadband systems published earlier this year found that they have soaked up $840 million in local taxpayer money over the past 20 years, while failing to gain the traction of positive cash flow amid greater and greater debt. They rely heavily on loans and transfers from established municipal utilities such as electricity and water. Even with the power of the public purse, 77 percent of the time, muni networks can't pay their way, the report states.

Dalton, Ga., (est. 2005 population 32,140) gains the dubious distinction of the nation's top municipal "money pits," accounting for $171 million, or $5,320 per capita, of the $840 million spent across the 52 cities studied.

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[2] Steven Titch, "Spinning its Wheels: An Analysis of Lessons Learned From iProvo's First 18 Months of Municipal Broadband," The Reason Foundation, September 2006, p. 17.

[3] See Michael J. Balhoff and Robert C. Rowe, *Municipal Broadband: Digging Beneath the Surface*, Balhoff & Rowe, LLC, September 2005.

The other cities in the top ten muni "Hall of Shame" are:
Tacoma, Wash, $110.9 million
Grant County, Wash., $76.4 million
Jackson, Tenn., $63.7 million
Alameda, Calif., $59.3 million
Provo, Utah, $45.7 million
Newnan, Ga., $41.8 million
Bristol, Va. $37.8 million
Marietta, Ga., $25.9 million
Muscatine, Iowa, $22.9 million

Together, the ten systems account for 78 percent of the total government-initiated spending within the telecom industry.[4]

Private sector problems

Friday, August 31, EarthLink announced it will pull out of the high-profile San Francisco municipal wireless project, capping a week in which the company dropped out of Chicago, agreed to pay a $5 million fine from the city of Houston for delaying work in the Bayou City, and fired its top muni wireless executive along with 900 employees involved in its muni wireless business effort.

EarthLink may well have put more money and resources into this than anyone. And, at the start, the public-private partnership model they devised appeared to have potential. Cities liked it because they could avoid using taxpayer money and leave the financial risk to the commercial partners. The trade-off for companies like EarthLink was that in return for low-cost access to city right of way, they had to agree to cover the entire city and usually provide a free or low-cost tier of service. In some, but not all cases, the city was obliged to purchase a level of wireless services from the partner.

Some muni wireless analysts, including Esme Vos at Muniwireless.com, say the muni wireless outlook is healthy and EarthLink's woes are isolated, but the evidence suggests that there are inherent flaws in the public-private model. MetroFi, EarthLink's chief rival, is having the same problems with recouping costs, and will no longer bid in cities that do not agree to "anchor tenant" commitments. Chicago, having broken off with EarthLink, could not reach terms with AT&T either. In the two weeks since EarthLink first reported its misgivings in Houston, none of the runner-ups from the city's original bid has stepped forward.

From what has transpired, it looks like EarthLink and its fellow wireless network companies did not realize the true cost of these systems until they reached the design stage. To cover Philadelphia, EarthLink's prototypical muni system, it took twice as many wireless nodes as planned. Plus, as muni services came online across the country, they drew far fewer customers than projected. When EarthLink and MetroFi began

[4] Sonia Arrison, Dr. Ronald Rizzuto and Vince Vasquez, *Wi-Fi Waste: The Disaster of Municipal Communications Networks*, Pacific Research Institute, February 2007, p. 8.

asking potential partners to raise their purchasing commitments as “anchor tenants”—in other words dip deeper into their treasuries to indirectly fund the systems—cities balked.

Why muni systems fail

Why do large-scale muni systems inevitably run into financial problems? Whether it’s a government-owned operation or a public-private partnership, muni broadband is predicated on the discredited notion that “if you build it, they will come.” The phone companies tried this 15 years ago, first with ISDN and then early DSL, but the applications—thus the consumer interest—weren’t there. Activists then spent ten years decrying the industry for holding back broadband, when in truth, network economics required build-out to expand in sync with demand.

The “build-it-they-will-come” approach assumes—incorrectly—broadband service works like a utility.

In their call to cities to take up the broadband cause, muni broadband proponents invoked a fashionable but flawed argument that equates municipal broadband to municipal water, power and narrowband telephony, services that many localities set up during the mid-20th century.

It is true that all of these rely on an underlying infrastructure that is expensive to build, but that’s where similarities end. Water, electricity and dial tone are inseparable from the infrastructure used to deliver them. Also, they cannot be user-configured or differentiated. It’s the same in every household. Turn on the faucet and you get water. Plug in an appliance and electricity flows. Once a water, power or landline phone system is in place, it is pointless to deploy another one. There can be no differentiation to make a second investment worthwhile. The inherent value of a utility derives from the existence and scope of the infrastructure.

The inherent value of broadband, however, derives not from the infrastructure but from the content, application and services that ride the bandwidth. Unlike water or electricity, you have the power to make your broadband service experience much different from your neighbor’s.

This inserts a value proposition into broadband that conventional utilities don’t have. The challenge is that broadband service providers must both create a value proposition and communicate it – and do it within the confines of a sound business plan.

Not The Same Beast: Characteristics of Conventional Public Utilities vs. Broadband

Characteristic	Water, Power and Landline Dial-Tone	Broadband Services
Upfront Investment	High	High
Ongoing Investment	Low	High
Incremental cost of additional users	Low	High
Marketing costs	Low	High
Business Model	Stable, Predictable from year-to-year	Unstable, Prone to Disruption
Value Proposition Necessary For Sustained Market Share	No	Yes
Allows long-term (>20 years) plant amortization	Yes	No
Predictable costs and revenues	Yes	No
Barriers to competitive entry	High	Low
Consumer Price Elasticity	Low	High
Speed of technology cycles	Slow	Fast
Nature of Competition	Regulated and price controlled, where permitted	Unregulated; no price controls

Table by The Heartland Institute

This is the key point that municipal proponents overlook or dismiss. One of the lessons of the dot-com bust was that consumers need a compelling reason to purchase broadband. There are factors other than incremental cost difference that influence a consumer's decision to "upgrade" to broadband. The notion that high-speed Internet access by itself will be enough of a driver to cover network costs has been proved false. Yet this is the premise that proponents of municipal broadband ask cities to buy into. Go to any municipal broadband web site, such as lafayetteprofiber.com or tricitiesbroadband.com, or even Utopia and iProvo, and you'll find the discussion is focused solely on the size and virtues of the bandwidth pipe with very little thought given to the importance of a value proposition to the business plan.

Broadband, in truth, is not a utility. Utilities require high investment up front, low investment thereafter combined with lengthy amortization of infrastructure. Broadband not only requires high investment up front, but continued high investment thereafter. Technology cycles are short and frequent upgrades and change-outs are necessary. When municipalities buy water and power from other providers, rates are usually regulated and, when not, predictable. Municipal broadband calls for programming and content to be purchased on a wholesale market where prices are volatile and unpredictable. Municipal water and power is a monopoly. Municipal broadband is a competitive alternative that requires extensive promotion and advertising to maintain and grow revenues and market share.

In 2004, when cities were hatching their muni plots, there was no YouTube. Video was still a rarity on the Web. Applications development, network build-out and broadband penetration all track. Come 2007, we find among individuals who use the Internet at home, 70 percent have a broadband connection, according to the Pew Internet and American Life Project.[5]

The private sector is rolling out broadband in all sorts of formats. Low-tier DSL, will still eclipse the wireless formats cities are using, can be purchased for $20 a month. Sprint's planned $5 billion WiMax network, branded Xohm and scheduled to launch in spring 2008, stands to blow any muni wireless system—if any do materialize—out of the water.

EarthLink, and some of its would-be city partners, like Chicago, have woken up to the fact that they are committing to building networks that have far less bandwidth, minimal in-building penetration and no price advantage. They are learning—the hard way unfortunately—that governments have no role in the wide provision of consumer broadband. They are wising up and getting out.

As the elected representatives of the people of Utah, you would serve your constituents—not to mention your state treasury—by appreciating these lessons and heeding their example.

Thank you for your time this morning. I am prepared to answer any questions.

[5] John B. Horrigan and Aaron Smith, "Home Broadband Adoption 2007," Pew Internet and American Life Project, June 2007. Available at http://www.pewinternet.org/pdfs/PIP_Broadband%202007.pdf.

Exhibit A
Utah Telecommunication Open Infrastructure Agency
Amended Budget for the year ended JUNE 30, 2007

		A	B	C
		Actual FY06	**Approved FY07**	**Amended FY07**
	Sources of Funds:			
	Operating Revenue:			
1	Charges for Services	950,032	5,250,000	1,750,589
2	Interest Income	893,971	1,700,000	5,389,754
3	Other income	495,259	571,000	154,978
4	New subscriber discount		(1,200,000)	(69,328)
	Other Financing Sources:			
5	Operating loans	1,121,818		
6	Bond proceeds		85,000,000	42,600,000
7	Prior Period Net	50,267,011	5,499,105	6,997,978
8	**Total Sources of Funds**	53,728,091	96,820,105	56,823,971
	Uses of Funds:			
	Agency operations			
9	Salaries and Benefits	648,547	825,000	965,194
10	Other Operating Expenses	1,023,985	651,300	1,174,804
	Network investment and operations			
11	Network operations	4,634,151	8,996,300	4,309,040
12	Customer Installations		2,115,000	400,000
13	Capital Outlay	36,163,469	64,222,505	21,125,824
	Debt Service			
14	Bond issuance costs	261,576	1,300,000	1,316,125
15	Debt Service Reserve			
16	Debt Service	3,998,385	9,510,000	10,468,551
17	**Total Uses of Funds**	46,730,113	87,620,105	39,759,538
18	**Net**	6,997,978	9,200,000	17,064,433

Exhibit A
Utah Telecommunication Open Infrastructure Agency
Proposed Budget for the year ended JUNE 30, 2008

	ACTUAL FYE 2006	AMENDED FYE 2007	PROPOSED FYE 2008
OPERATING BUDGET			
Subscriber Data			
Subscribers		6,493	13,000
Revenue	1,807,323	2,247,087	4,700,000
Operating Expenses			
Wages / Benefits	648,547	990,194	1,000,000
Other operating Expenses	202,339	394,920	458,000
Total Operating Expenses	850,886	1,385,113	1,458,000
Total Professional Services	679,845	296,053	350,000
Total Network Management	4,634,152	4,309,040	4,350,000
Other Income / Expense			
Other Expense	248,450	-	-
Other Income	(219,786)	(4,658,269)	-
Depreciation	2,643,074	4,746,000	7,200,000
Interest Income	(922,583)	(790,730)	(600,000)
Interest Expense	4,248,038	7,711,077	9,250,000
Total Other Income / Expense	5,997,192	7,008,077	15,850,000
Total Expenses	12,162,075	12,998,284	22,008,000
Net Income	(10,354,752)	(10,751,196)	(17,308,000)
CAPITAL BUDGET			
Engineering		4,004,361	2,000,000
Outside Plant		684,084	18,000,000
Intercity Connections		17,697	2,000,000
Inside Plant		569,728	2,000,000
Customer Premise Equipment		136,173	1,000,000
Subscriber Connections		698,571	3,000,000
Office Equipment		89,638	-
Vehicles, Tools and Equipment		244,991	-
Construction in Progress		6,880,581	2,000,000
Total Capital Expenditures	-	13,325,824	30,000,000
FINANCING			
Series 2006 Bonds		30,000,000	
Principal Payments		(1,400,000)	(1,300,000)
Series 2007 RUS		12,600,000	25,000,000
Principal Payments			
Net Financing Activities		41,200,000	23,700,000

Presentation of Exhibit A in Previous Budget Format
Utah Telecommunication Open Infrastructure Agency
Proposed Budget for the year ended JUNE 30, 2008

		A	B	C
		Actual FY06	**Amended FY07**	**Proposed FY08**
	Sources of Funds:			
	Operating Revenue:			
1	Charges for Services	950,032	1,750,589	4,700,000
2	Interest Income	893,971	5,389,754	600,000
3	Other income	495,259	154,978	
4	New subscriber discount		(69,328)	
	Other Financing Sources:			
5	Operating loans	1,121,818		
6	Bond proceeds		42,600,000	25,000,000
7	Prior Period Net	50,267,011	6,997,978	17,064,433
8	**Total Sources of Funds**	53,728,091	56,823,971	47,364,433
	Uses of Funds:			
	Agency operations			
9	Salaries and Benefits	648,547	965,194	1,000,000
10	Other Operating Expenses	1,023,985	1,174,804	808,000
	Network investment and operations			
11	Network operations	4,634,151	4,309,040	4,350,000
12	Customer Installations		400,000	2,600,000
13	Capital Outlay	36,163,469	21,125,824	27,400,000
	Debt Service			
14	Bond issuance costs	261,576	1,316,125	
15	Debt Service Reserve			
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17	**Total Uses of Funds**	46,730,113	39,759,538	46,458,000
18	**Net**	6,997,978	17,064,433	906,433